#### Indoor Air Quality Tools for Schools

## Building a Multi-District/Statewide Strategy:

## The CT School Indoor Environment Resource Team Experience







#### Agenda:

- 1. Background
- 2. Organizing a Comprehensive, Collaborative Approach
- 3. School District Outreach & Recruitment
- 4. Training Program
- 5. Evaluation & Follow-Up
- 6. Summary: Lessons Learned

#### **Background**

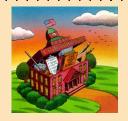


School IAQ in CT

•Why CSIERT?

Accomplishments

#### How CT Got Involved



- Large # of IAQ Phone Inquiries
- Serious School IAQ Incidences
- CT CASE Report
- EPA's Tools For Schools -Useful, Practical Intervention

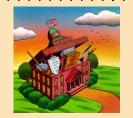
#### **Barriers**



Lack of IAQ Knowledge,
 Experience

Inadequate Agency Resources

Need to Assist Schools Re: TfS



## Needed: A Comprehensive, Collaborative Approach

#### Rationale



- Schools Have Competing Issues
- Schools Need Assistance To Implement TfS
- TfS Should be Implemented on District Level
- Multi-tiered Response To School IAQ

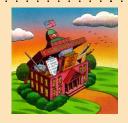
#### Connecticut School Indoor Environment Resource Team



- ·CTCOSH
- CT Dept of Envir. Protection
- CT Dept of Education
- ·CT OSHA
- CT Dept of Public Health
- CT Education Association
- American Lung Assn of CT
- CT Assn of Local Health Drs.
- CT Assn of School Nurses
- CT Interlocal Risk Mgt Assn

- AFT Connecticut
- UCONN Health Center
- U.S. EPA Region I
- Yale Occup/Envir. Medicine Program
- US Dept of Education, Civil Rights
   Office, Boston
- CT Assn of Boards of Education
- CT School Building & Grounds Assn
- Southeast CT Indoor Air Coalition
- CT Assn of School Administrators
- •CT PTA

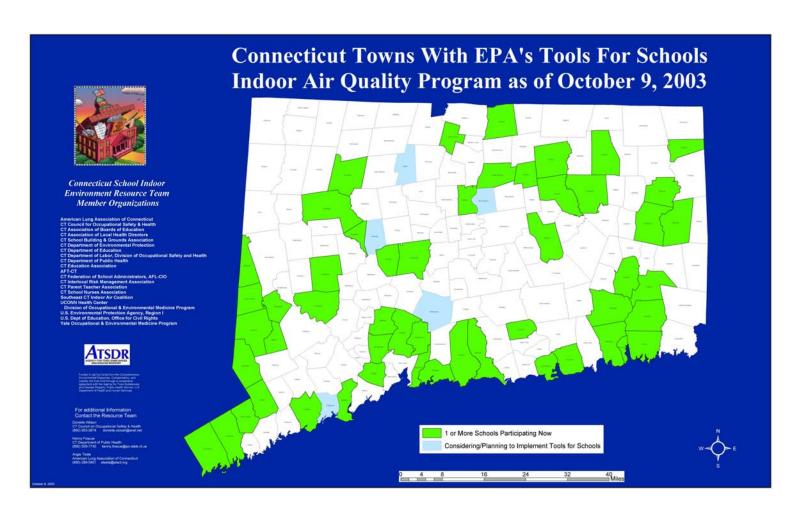
#### Accomplishments



- Established a Core Team of Expertise From 20 Agencies
- Trained TFS Teams in
  - Over 270 Schools
  - > 48 school districts
  - > almost 1400 staff, parents trained
- Conducted over 40 Workshops, Conference Presentations
  - Sponsored 2 Successful Statewide Conferences

#### CT Schools With TsF

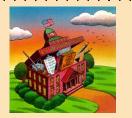




## Resource Team Accomplishments (2)



- Developed A "Train-the-Trainer Program
  - Produced Training Manual, Workshop Module
  - Conducted 2 Day-long Workshops
- Impact/Outcome Evaluation Survey
- Helped Make School IAQ High Priority Public Health Issue



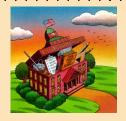
# School District Outreach Recruitment

#### TfS Implementation Scheme

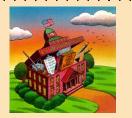




#### "Buy-in" Presentation



- Mandatory Presentation to School District Executive Staff
- Local Health Dept Present
- Self-Interest Based Pitch:
  - Health Absenteeism & Asthma
  - Planning Mechanism –Control over Problem
  - Importance of Communication Component
- Implementation Logistics



## CSIERT Training

## Program

#### Training Program



#### **2 Part Training:**

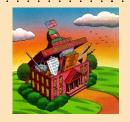
#### 1st Module:

- IAQ Health issues
- Basics of School IAQ issues
- Review of TFS Action Packets/Program
- Importance of Effective Communication

#### 2nd Module:

- Walkthrough Training
- Use Industrial Hygienists with Training Background

#### Training Program Objectives (1)



#### Introduction/Health:

- ✓ Overview of School IAQ
- ✓ Understand Basic IAQ Health Issues
- ✓ Identify Potential IAQ-Related Symptoms
- ✓ Link Symptoms to Potential Sources

#### Training Program Objectives (2)



#### **Implementing TfS:**

- √ Contents of TfS Kit
- √ Role of Coordinator
- √TfS Implementation Steps
- **✓** Familiarity With Checklists
- ✓Importance of Communication Plan
- ✓ Develop Group Plan to Activate TfS







#### First Training Workshop Agenda:

- 1. Welcome and Introductions
- 2. Overview of Training

Why School IAQ Is Important

Video: Taking Action

3. Indoor Air Quality Health Issue

**Exercise** 

IAQ Health Overview

Short Break

- 4. Overview of Tools for Schools Kit: What's in the Box?
- Role of the Coordinator
- Implementation Summary
- Using the Checklists
- Importance of Communication Plan
- Developing a Group Plan
- 5. Next Steps?





#### Walkthrough Investigation Training

- About 2 Months After 1st Training
- Facilitated by Industrial Hygienist
- 2 hour training at a School
- Overview of Sources, Ventilation Basics
- Exercises Re: Problem ID
  - Follow Up By Local Health Dept



#### "Train the Trainer" Program



✓ All Day Workshop Utilizing Lecture, Exercises, Handbook

#### ✓ Purposes:

- ■To Train Trainers for 1<sup>st</sup> Session Workshop
- Urban District Strategy
- ✓ Large Effort Underway in Hartford



### Evaluation &

## Follow-Up

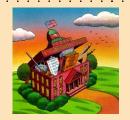
#### Evaluation Survey: Impact/Outcome



#### **Objectives:**

- Document IAQ Problems
   Encountered
- Track IAQ Improvements Implemented
- Attempt to Document Health Impacts

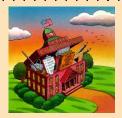
#### Evaluation Survey: Impact/Outcome



#### Types of Questions:

- Demographic Information
- Checklist of IAQ Problems
- New Policies Implemented
- Barriers Encountered
- Resources Needed
- Health Assessment Qs for Nurses

#### 2002 Evaluation Results



#### Surveyed 50 School TfS Coordinators

#### 25 Schools Responded

Selected IAQ Problems	Identified?	Repaired/ scheduled repair
Ventilation	60 %	49%
Carpet Removal Needed	80%	48%
General Cleanliness	64%	36%
Bus Idling Policy Lacking	60%	40%
Water Problems in General	56%	40%
Roof leaks	75%	56%

#### 2003 Evaluation Results



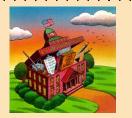
- Surveyed 170 School TfS Coordinators
- 77 Schools Responded

Selected IAQ Problems	Identified?	Repaired/ scheduled repair
Ventilation	81 %	75%
Carpet Removal Needed	70%	66%
General Cleanliness	69%	54%
Bus Idling Policy Lacking	38%	65%
Water Problems in General	93%	78%
Roof leaks	61%	73%

#### Follow-up Efforts



- Emphasis on Local Health Department Involvement
- Mailings To TfS Coordinators,
   Superintendents
- Encourage District-Wide Coordination Group
- E-mail Communication System/Newsletter



## Summary:

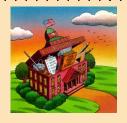
## Lessons Learned

#### What We Have Learned



- Pool Your Resources Big Job!
- Develop Effective Outreach Program
- Training Key to Successful Committees
- Focus on School Systems
- Need for Follow-up Plan

#### Pitfalls to Avoid



- Make sure School Administration is "Bought in"
- Plan Wisely: Avoid Logistical Problems
- Make sure Schools Ready Re: Training
- Identify Adequate # of Trainers
- Watch Out for Unscrupulous "Consultants"

#### Resources on CD

(Steal It –It's Yours!)



- 1st Training PPt Presention
- 2<sup>nd</sup> Training PPt Presentation
- Implementation Guidelines Memo
- Train-the-Trainer Curriculum
- Useful Forms